**DOCKET NO.:** 304070.01 / MSFT-2832 **PATENT** 

**Application No.:** 10/748,569

Office Action Dated: June 13, 2007

#### REMARKS

Upon entry of the present amendment, claims 1-2, 5-10, and 13-19 will remain pending in this application. Applicant respectfully submits that no new matter is added in the above amendments.

Claims 17-19 stand rejected under 35 U.S.C. §102(b) as being allegedly anticipated by United States Patent 6,055,526 ("Ambroziak"). Claims 1-2, 5-10, and 13-16 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Ambroziak in view of United States Patent Application No. 2003/0204513 ("Bumbulis"). Applicants respectfully traverse.

### Interview Summary

Applicant's undersigned representative, Kenneth Eiferman, and Examiner Sheree Brown participated in a telephonic interview on September 10, 2007 to discuss the independent claims in relation to the cited references. Examiner Brown agreed to reevaluate the pending rejections in light of the arguments below.

#### Rejections under 35 U.S.C. §102(b)

Claims 17-19 stand rejected under 35 U.S.C. §102(b) as being allegedly anticipated by United States Patent 6,055,526 ("Ambroziak").

With respect to independent claim 17, the Applicant has previously asserted in an Amendment dated February 7, 2007 that the Ambroziak reference does not include the feature of "comparing the first normalized index key with a second normalized index key preceding the first normalized index key in the memory page." More specifically, the cited portions of Ambroziak (column 17, lines 22-31 and 42-45) teach comparing concept identifiers with a specified table to determine which C/P (concept/position) groups should be decompressed. While a comparing function takes place, it is not seen where such concept identifiers and the MaxTable equate to the first and second normalized index keys in the claim.

It will be seen from Applicant's specification at paragraph [0007] that "a normalized key is a key that has been transformed to remove any difficulties related to the **DOCKET NO.:** 304070.01 / MSFT-2832 **PATENT** 

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different types making up the key. In this way, a normalized key may be compared with another normalized key without any instantiation of types or use of any type specific functions." Further, a normalized key can be constructed by concatenating, from left to right, the normalized form of individual column values, where each type has an associated transformation function that can be used to create the normalized value (paragraph [0019] of the specification).

Accordingly, it is maintained that Ambroziak does not describe the use of a normalized key, as well as the comparison of a normalized key with a normalized index key in memory. Thus, the rejection of claim 17, as well as claims 18 and 19 depending therefrom, is respectfully traversed and withdrawal of the rejection of such claims is requested.

## Rejections under 35 U.S.C. § 103(a)

Claims 1-2, 5-10, and 13-16 stand rejected under 35 U.S.C. §103(a) as allegedly being obvious by Ambroziak in view of United States Patent No. 2003/0204513 to Bumbulis ("Bumbulis").

With respect to claim 1, it is seen by the present rejection that the Examiner agrees with Applicant's position that the Ambroziak reference fails to disclose or teach the limitation "wherein each slot corresponds to a normalized index key in the memory page and comprises a memory offset of the corresponding key and an indicator indicating if the corresponding normalized index key is compressed." Thus, the Bumbulis reference has been utilized by the Examiner in combination with the Ambroziak reference.

As noted above, the Applicant takes the position that the b-tree data structure of the present invention, where normalized index keys are provided therein for ease of comparison, is different from the concept/position system in Ambroziak. Thus, it is not seen where the normalized keys nor the manipulation thereof in claim 1 is disclosed by the Ambroziak reference.

While the Bumbulis reference does involve b-tree data structures, it discloses a method for creating an index based on a path-compressed binary trie which includes internal nodes and leaf nodes. Thus, even though Bumbulis discloses normalization of keys, it is not seen where the bit offsets and keys associated with the internal nodes and leaf nodes of the

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Patricia tree correspond to the "memory offset of the corresponding [normalized index] key." Further, it is not seen where the portion of the Bumbulis reference cited (paragraph [0140]) relates to "an indicator indicating if the corresponding normalized index key is compressed." No where in the description of the blind search of a Patricia tree does Bumbulis specify that an indicator is found indicating that a normalized index key is compressed.

It is further asserted that there is nothing within the Bumbulis reference that would motivate one skilled in the art to combine the teachings thereof with the system of Ambroziak. Once again, this stems from the concept/position system of Ambroziak being fundamentally different from a b-tree data structure. The Applicant also questions whether the teachings of Bumbulis translate to use by the system of Ambroziak.

It will be appreciated that claim 5, while depending from claim 1, includes essentially the same limitations as in claim 17. Thus, the arguments set forth hereinabove for both claim 1 and claim 17 are also applicable to such claim. Likewise, claims 6 and 7 depend from claim 5 and are the same as claims 18 and 19 depending from claim 17.

Claims 9 and 10 contain essentially the same limitations as claims 1 and 2, respectively, and the arguments previously set out are applicable thereto. Claims 13-15 contain essentially the same limitations as claims 5-7 and 17-19, respectively.

Accordingly, the Applicant respectfully traverses the rejections for the reasons set forth above. Therefore, the Applicant submits that claims 1-2, 5-10 and 13-16 are patentable and the rejections thereof are respectfully traversed.

Accordingly, reconsideration and withdrawal of all rejections under 35 U.S.C. §103 rejections are respectfully requested.

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# **CONCLUSION**

In view of the above amendments and remarks, the Applicant respectfully submits that the present application is in condition for allowance.

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